



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/712,511

11/13/2003

Takayuki Yajima

848075/0060

8914

29619 7590 04/06/2010
SCHULTE ROTH & ZABEL LLP
ATTN: JOEL E. LUTZKER
919 THIRD AVENUE
NEW YORK, NY 10022

EXAMINER

DEAN, RAYMOND S

ART UNIT

PAPER NUMBER

2618

MAIL DATE

DELIVERY MODE

04/06/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/712,511	Applicant(s) YAJIMA, TAKAYUKI	
	Examiner RAYMOND S. DEAN	Art Unit 2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 March 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 May 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see Applicants' remarks filed March 16, 2010 with respect to the rejection(s) of claim(s) 1 under 35 U.S.C. 103 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of newly found prior art Masato (JP 2000-316040) and Asami (US 2002/0042287).

Masato teaches a housing having a speaker section having a first mode of operation and a second mode of operation (Figure 1, Sections 0014, 0015). Masato further teaches operating said speaker section in said first mode of operation in the closed state, and switching said speaker section from said first mode of operation to said second mode of operation when said housings are brought into the opened state from the closed state while the communication is in progress (Sections 0014, 0015), and a first speaker and second speaker are exposed outside in both the closed state and the opened state (Figure 1, both speakers 3 and 8 are exposed to the outside when the flip is opened and closed).

Asami teaches wherein said speaker section further comprises a first speaker provided at one end of a front face of and in a longitudinal direction of said first housing and a second speaker provided at the other end of the front face of and in a longitudinal direction of said first housing (Figure 1).

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 – 5, 8 – 10, 13 – 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mizuta et al. (US 2003/0064758) in view of Asami (US 2002/0042287) and in further view of Masato (JP 2000-316040)

Regarding Claim 1, Mizuta teaches a portable radiotelephone comprising: a first housing having at least a display section and a speaker section (Figure 4A, Section 0078); said display section having a first mode of operation and a second mode of operation (Section 0145 lines 16 – 20, one mode is the vertical mode and the other mode is the horizontal mode); a second housing having at least a main operation section and a microphone (Figure 4A, Section 0076); wherein both of said housings are openably and closably coupled together so that said main operation section is covered with said first housing in a closed state and is exposed outside in an opened state (Figures 9B – 9D), and said display section and said speaker section are exposed outside in both of the closed state and the opened state (Figures 9B – 9D), a communication control section for enabling a communication (Sections 0035, 0037, 0141 – 0142, the portable telephone can communicate in the open or closed mode, in the closed mode the secondary operation keys (207) are used to communicate).

Art Unit: 2618

Mizuta does not teach a first housing having a speaker section having a first mode of operation and a second mode of operation wherein said speaker section further comprises a first speaker provided at one end of a front face of and in a longitudinal direction of said first housing and a second speaker provided at the other end of the front face of and in a longitudinal direction of said first housing, said display section and said first speaker and said second speaker are exposed outside in both the closed state and the opened state, and operating said speaker section in said first mode of operation in the closed state, and switching said speaker section from said first mode of operation to said second mode of operation when said housings are brought into the opened state from the closed state while the communication is in progress.

Asami teaches wherein said speaker section further comprises a first speaker provided at one end of a front face of and in a longitudinal direction of said first housing and a second speaker provided at the other end of the front face of and in a longitudinal direction of said first housing (Figure 1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Mizuta with the speaker feature of Asami for the purpose of outputting stereophonic sound while maintaining a small size and lightweight configuration as taught by Asami.

Masato teaches a housing having a speaker section having a first mode of operation and a second mode of operation (Figure 1, Sections 0014, 0015). Masato further teaches operating said speaker section in said first mode of operation in the

Art Unit: 2618

closed state, and switching said speaker section from said first mode of operation to said second mode of operation when said housings are brought into the opened state from the closed state while the communication is in progress (Sections 0014, 0015), and a first speaker and second speaker are exposed outside in both the closed state and the opened state (Figure 1, both speakers 3 and 8 are exposed to the outside when the flip is opened and closed).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the mobile phone of Mizuta in view of Asami with the above speaker phone technique of Masato in order to provide more versatile mobile phone that can enables a user to communicate hands free as taught by Masato.

Regarding Claim 2, Mizuta in view of Asami and in further view of Masato teaches all of the claimed limitations recited in Claim 1. Mizuta further teaches at least one auxiliary operation section provided on other surface of said first and second housings than surfaces where said first and second housings are opposed each other in the closed state (Sections 0035, 0037), wherein said communication control section controls to connect a communication line when an incoming call is received and then said auxiliary operation section is operated in the closed state (Section 0142, the transmission and receiving of character data and graphics data requires incoming and outgoing data calls).

Regarding Claim 3, Mizuta in view of Asami and in further view of Masato teaches all of the claimed limitations recited in Claim 2. Mizuta further teaches a first speaker arranged on a surface provided with said display section of said first housing

Art Unit: 2618

interposing said display section (Figure 4A, Section 0078), said first housing and said second housing are coupled each other to be rotated around a shaft which is provided in a direction of passing through the first and second housings (Figures 9B – 9D, Section 0075 lines 3 – 7, the biaxial hinge is the shaft), wherein in a mode of operation said communication control section controls said first speaker which is arranged furthest from said microphone to function as a receiver (Figure 9D, Section 0142, the speaker (203) is enabled). Masato further teaches wherein in said first mode of operation said communication control section controls said first speaker which is arranged furthest from said microphone to function as a receiver and disables said second speaker (Sections 0014, 0015), in said second mode of operation said communication control section controls said second speaker to function as a receiver, and disables said first speaker (Sections 0014, 0015).

Regarding Claim 4, Mizuta in view of Asami and in further view of Masato teaches all of the claimed limitations recited in Claim 1. Mizuta further teaches wherein said communication control section controls said portable radiotelephone to disconnect the communication once the portable radiotelephone is brought into the closed state again while the communication is in progress in the opened state (Sections 0131, 0134).

Regarding Claim 5, Mizuta in view of Asami and in further view of Masato teaches all of the claimed limitations recited in Claim 1. Mizuta further teaches an opened/closed state detecting section for detecting the opened/closed state of said first housing and said second housing (Section 0095 lines 3 – 5).

Regarding Claim 8, Mizuta in view of Asami and in further view of Masato teaches all of the claimed limitations recited in Claim 1. Mizuta further teaches wherein said first housing and said second housing are coupled each other so as to be opened and closed by sliding motion (Section 0112 lines 6 – 8).

Regarding Claim 9, Mizuta teaches a portable radiotelephone comprising a second housing having a main operation section (Figure 4A, Section 0076), a first housing to be overlapped on said second housing so as to cover said main operation section (Figures 4A, 9D, Section 0078), and a coupling section which couples respective one ends of said first and second housings in such a manner that said first and second housings are relatively rotated around a shaft extending in a direction of overlapping (Figures 9B – 9D, Section 0075 lines 3 – 7, the biaxial hinge is the shaft), in which said portable radiotelephone is designed so as to be shifted between a closed state in which said first and second housings are overlapped and an opened state in which said first or second housing is rotated by 180 degree from this closed state (Figures 9B and 9D), a microphone is provided on the other end of said second housing (Figure 9B, microphone (103)), a first speaker is provided at one end of said first housing which is directed in same direction with a face thereof provided with said main operation section (Figure 9B), and a communication control section for controlling communication to perform in either said closed state and said opened state (Sections 0035, 0037, 0141 – 0142, the portable telephone can communicate in the open or closed mode, in the closed mode the secondary operation keys (207) are used to communicate).

Mizuta does not teach a first speaker is provided at one end of and in a longitudinal direction of said first housing which is directed in same direction with a front face thereof provided with said main operation section and a second speaker is provided at the other end of and in longitudinal direction of said first housing which is directed in the same direction with the front face thereof provided with said operation section, wherein said first speaker and said second speaker are exposed outside in both of said opened state and said closed state, controlling operation of said first and second speaker based on whether said radiotelephone is in the opened state or in the closed state and continuing communication even after the portable radiotelephone is brought into the opened state from the closed state while the communication is in progress.

Asami teaches a first speaker is provided at one end of and in a longitudinal direction of said first housing which is directed in same direction with a front face thereof provided with an operation section and a second speaker is provided at the other end of and in longitudinal direction of said first housing which is directed in same direction with the front face thereof provided with said operation section (Figure 1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Mizuta with the speaker feature of Asami for the purpose of outputting stereophonic sound while maintaining a small size and lightweight configuration as taught by Asami.

Masato teaches wherein a first speaker and a second speaker are exposed outside in both of said opened state and said closed state (Figure 1, both speakers 3

Art Unit: 2618

and 8 are exposed to the outside when the flip is opened and closed), controlling operation of said first and second speaker based on whether said radiotelephone is in the opened state or in the closed state and continuing communication even after the portable radiotelephone is brought into the opened state from the closed state while the communication is in progress (Figure 1, Sections 0014, 0015).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the mobile phone of Mizuta in view of Asami with the above speaker phone technique of Masato in order to provide more versatile mobile phone that can enables a user to communicate hands free as taught by Masato.

Regarding Claim 10, Mizuta in view of Asami and in further view of Masato teaches all of the claimed limitations recited in Claim 9. Masato further teaches wherein the communication is performed by means of said first speaker and said microphone in the closed state, and the communication is performed by means of said second speaker and said microphone in the opened state (Figure 1, Sections 0014, 0015).

Regarding Claim 13, Mizuta in view of Asami and in further view of Masato teaches all of the claimed limitations recited in Claim 9. Masato further teaches a communication control section for controlling functions of said first and second speakers and said microphone (Figure 1, Sections 0014, 0015); Mizuta further teaches at least one auxiliary operation section provided on other surface of said first and second housings than surfaces where said first and second housings are opposed each other in the closed state (Sections 0035, 0037), wherein said communication

Art Unit: 2618

control section controls to connect a communication line when an incoming call is received and then said auxiliary operation section is operated in the closed state (Section 0142, the transmission and receiving of character data and graphics data requires incoming and outgoing data calls). Kim further teaches a second speaker (Figure 1, Sections 0014, 0015).

Regarding Claim 14, Mizuta in view of Asami and in further view of Masato teaches all of the claimed limitations recited in Claim 9. Mizuta further teaches wherein said communication control section controls said portable radiotelephone to disconnect the communication once the portable radiotelephone is brought into the closed state again while the communication is in progress in the opened state (Sections 0131, 0134).

4. Claims 16 – 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mizuta et al. (US 2003/0064758) in view of Asami (US 2002/0042287) in view of Masato (JP 2000-316040), as applied to Claims 1, 9 above, and further in view of Kim (US 6,359,984)

Regarding Claims 16, 17, Mizuta in view of Asami and in further view of Masato teaches all of the claimed limitations recited in Claim 1, 9. Mizuta in view of Asami and in further view of Masato does not teach wherein a communication to another party is initiated and a communication from a third party is answered in a closed state.

Kim teaches wherein a communication to another party is initiated and a communication from a third party is answered in a closed state (Cols. 1 lines 57 – 60, 4

Art Unit: 2618

lines 59 – 62, typical send buttons in cellular phones are used to initiate calls as well as receive calls thus the user can initiate a communication with another party in the closed state).

Mizuta in view of Asami and in further view of Masato and Kim teach a mobile device that enables a user to communicate when both housings are in the opened or closed state thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the two speaker concept of Kim as an alternative means for communicating regardless of whether or not both housing are in the opened or closed state.

5. Claims 6, 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mizuta et al. (US 2003/0064758) in view of Asami (US 2002/0042287) in view of Masato (JP 2000-316040), as applied to Claims 3,9 above, and further in view of Kim (US 6,993,366)

Regarding Claims 6, 11, Mizuta in view of Asami and in further view of Masato teaches all of the claimed limitations recited in Claims 3, 9. Mizuta in view of Asami and in further view of Masato does not teach wherein said first and second speakers sound an incoming call sound when an incoming call is received.

Kim teaches wherein said first and second speakers sound an incoming call sound when an incoming call is received (Col. 4 lines 17 – 24, first and second speakers are enabled thus said speakers will sound an incoming call sound when there is an incoming call).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the speakers of Mizuta in view of in view of Asami and in further view of Masato with the above speaker concept of Kim for the purpose of allowing a user to hold a smooth conversation regardless of the direction in which said user is holding said portable phone as taught by Kim.

6. Claims 7, 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mizuta et al. (US 2003/0064758) in view of Asami (US 2002/0042287) in view of Masato (JP 2000-316040) in view of Kim (US 6,993,366), as applied to Claims 6, 11 above, and further in view of Masamura (US 6,819,939).

Regarding Claims 7, 12, Mizuta in view of in view of Asami in view of Masato and in further view of Kim teaches all of the claimed limitations recited in Claims 6, 11. Mizuta in view of in view of Asami in view of Masato and in further view of Kim does not teach wherein each of said first and second speakers independently sounds when an incoming call is received, to make stereo effects.

Masamura teaches first and second speakers that independently produce sound to make stereo effects (Col. 2 lines 29 – 32).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the portable phone of Mizuta in view of in view of Asami in view of Masato and in further view of Kim with the stereo speaker configuration of Masamura as alternative means for achieving the predictable result of stereophonic sound.

Art Unit: 2618

7. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mizuta et al. (US 2003/0064758) in view of Asami (US 2002/0042287) in view of Masato (JP 2000-316040), as applied to Claim 9 above, and further in view of Babasaki et al. (US 2002/0198017).

Regarding Claim 15, Mizuta in view of Asami and in further view of Masato teaches all of the claimed limitations recited in Claim 9. Mizuta in view of Asami and in further view of Masato does not teach a gain adjusting section for adjusting sensitivity of said microphone, wherein said communication control section controls said gain adjusting section to increase gain of said microphone during the communication in the closed state to be higher than gain of said microphone during the communication in the opened state.

Babasaki teaches a teach a gain adjusting section for adjusting sensitivity of a microphone, wherein said communication control section controls said gain adjusting section to increase gain of said microphone during the communication in a first state to be higher than gain of said microphone during the communication in a second state (Section 0048 lines 7 – 13, one state is the very soft mode and another state is the very loud mode).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the portable phone of Mizuta in view of Asami and in further view of Masato with the gain adjusting circuitry of Babasaki for the purpose of enabling a user to effectively communicate on the phone in an environment in which said user must speak softly so as not to disturb people nearby as taught by Babasaki.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to RAYMOND S. DEAN whose telephone number is (571)272-7877. The examiner can normally be reached on Monday-Friday 6:00-2:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward F. Urban can be reached on 571-272-7899. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Raymond S Dean/
Examiner, Art Unit 2618
Raymond S. Dean
April 2, 2010